

REMARKS

Due to the numerous grammatical and idiomatic errors contained in the abstract and specification, Applicants are enclosing herewith a substitute abstract and specification including "clean" and "marked-up" copies. The substitute specification now states that AA-GWR water retention measurement is based on the pressure filtration of coatings under an externally applied air pressure of a certain time period and utilizes gravimetric determination of an aqueous phase penetrating through a filter and absorbed by a paper sample. This clearly does not constitute new matter as illustrated by the enclosure from Kaltec Scientific, Inc. which sells AA-GWR water retention meters and discusses the principle of measurement of these meters.

The claims have been amended in order to correct possible grammatical and idiomatic errors contained therein. No new matter has been added. It is respectfully submitted that the rejection of Claims 1, 2 and 4-9 under 35 USC 112, first paragraph, has been overcome by the amendments to the specification. If the Examiner feels that there are any outstanding matters left to be resolved in the present application, he is respectfully requested to contact the undersigned in order that they may be dealt with. Favorable consideration is respectfully solicited.

Respectfully submitted,


Terryence F. Chapman

TFC/smd

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Encl: Replacement Abstract
Clean Substitute Specification
Marked-Up Substitute Specification
Attachment from Kaltec Scientific, Inc.
Postal Card

136.07/05



22425 Heslip Drive
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248.349.8100 Fax 248.349.8909

AA-GWR Water Retention Meters

Model 150 (Analog) and Model 250 (Digital)
Magnetic Cup & Mat | AA-GWR Supplies

Principle of Measurement

The method is based on pressure filtration of coatings under an externally applied air pressure over a certain time period. It utilizes gravimetric determination of the aqueous phase penetrating through a filter and absorbed by a paper sample. The measurement is very sensitive to changes in coating colour formulation and has good reproducibility because the procedure is simple and the measurement system is well defined. Various contact times and pressures can be easily studied.

How It Works

The absorbing paper is weighed and placed on the lower mat. The filter and cup are set on top of the paper. The system is sealed by the magnets on the cup and lower mat. The coating is then poured into the test cell and placed into the unit. The test cell is then pressurized for a given time period. Upon completion of the test period, the paper is re-weighed to determine the amount of liquid de-watered from the coating.

Features and Benefits

- Measures coating de-watering under pressure.
- Identifies differences on absorptive properties of paper samples.
- Rapid measurements, 2 - 5 minutes per test.
- Easy to operate and clean.
- Very high accuracy and repeatability.
- Portable, ideal for on-site troubleshooting and problem solving at the mill.
- Digital timer controls test duration and alerts the operator when the test is complete.

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THERMALLY SENSITIVE RECORDING MEDIUM

ABSTRACT

Provision of a thermally sensitive recording medium ~~comprising~~made up of an undercoating layer containing a pigment and a binder as main components and a thermally sensitive color--developing layer containing a colorless or pale--colored basic leuco dye and a color--developing agent which develops a color by reacting with said basic leuco dye as main components on a substrate, wherein ~~said~~the undercoating layer contains a water-retention agent and a pigment whose oil--absorbing capacity prescribed by JIS K 5105 is from 80cc/100g to 120cc/100g as a pigment, ~~further solid.~~ Further, the solids concentration of a coating for the undercoating layer is from 25% to 45% and the dynamic water-retention capacity, which is Water retention measured with AA-GWR, is 350g/m² or less.